AMENDMENTS TO THE CLAIMS:

This listing of claims below replaces all prior versions and listings of claims in the application.

Listing of claims:

1. – 8. (Cancelled)

9. (Previously presented) A monolithic display device comprising a N-type light emitting material beside a cathode, carrier blocking layer after the light-emitting layer, a P-type light-sensing material after the carrier blocking layer and a N-type material after the light-sensing material.

10. (Previously presented) A display device as in claim 9 wherein an anode-contact is an efficient hole injector.

11. (Previously presented) A display device as in claim 9 wherein an anode-contact is an efficient hole injector made on Indium Tin Oxide.

12. (Previously presented) A display device as in claim 9 wherein the light sensing area is made of P-type organic semiconductor.

13. (Previously presented) A display device as in claim 9 such that there is a N-type type light emitting material ~~is~~ beside a cathode, carrier blocking layer after the light-emitting layer, a P-type light-sensing material after the carrier blocking layer such that a N-type material after the light-sensing material forms a potential barrier at an anode contact with the device.

14. (Previously presented) A display device as in claim 13 wherein the N-type area adjacent to the anode-contact is made of N-type organic semiconductor made of tris (8-hydroxy-quinoline) aluminium (Alq_3) material.

15. (Previously presented) A display device as in claim 13 wherein an incident laser on the light-sensing area causes a charge build-up on the anode-contact; wherein the N-type material adjacent to the anode-contact is made of such a material that it takes longer for the charge to dissipate than in case of Alq_3 material such that a pixel in a display screen remains lighted for a frame period or more.

16. (Previously presented) A display device as in claim 13 wherein an incident laser on the light-sensing area causes a charge build-up on the anode-contact; wherein there is a thin layer of material at the anode-contact such that it takes longer for the charge to dissipate such that a pixel in a display screen remains lighted for a frame period or more.

17. (Previously presented) A display device as in claim 13 wherein an incident laser on the light-sensing area causes a charge build-up on the anode-contact; wherein the N-type material adjacent to the anode-contact has a trap energy level for trapping dissipating charges because of which it takes longer for the charge to dissipate at the anode-contact such that a pixel in a display screen remains lighted for a frame period or more.

18. (Previously presented) A display device as in claim 13 wherein an incident laser on the light-sensing area causes a charge build-up on the anode-contact; wherein there is a thin layer of a material, at the anode-contact, having a trap energy level for trapping dissipating charges because of which it takes longer for the charge to dissipate at the anode-contact such that a pixel in a display screen remains lighted for a frame period or more.

19. (Previously presented) A display device as in claim 13 wherein the anode-contact is made up of a high work function metal and the potential barrier at the anode is a Schottky junction.

20. (Currently Amended) A ~~monolithic~~ display device as in claim 13, ~~with an applied electric field across it, comprising of a light-emitting material and a light-sensing material such that when the device is illuminated by a laser, photo-current amplification occurs within the device causing light emission from the light-emitting material,~~ wherein the light-sensing area is sensitive to infrared light only and the light-emitting area emits visible light only.

21. (Currently amended) A ~~monolithic~~ display device as in claim 13, ~~with an applied electric field across it, comprising of a light-emitting material and a light-sensing material such that when the device is illuminated by a laser, photo-current amplification occurs within the device causing light emission from the light-emitting material,~~ wherein the light-sensing area is sensitive to infrared and visible light and the light-emitting area emits visible light such that a feedback effect can take place to enhance interval of light emission.

22. (Previously presented) A display device as in claim 13 wherein the carrier blocking material is made up of N,N'-diphenyl-N-N'-bis(l-naphtyl)-l-l'biphenyl-4,4"diamine (NPB) material.

23. (Previously presented) A display device as in claim 13 wherein the light sensing area is made up of titanyl phthalocyanine (TiOPc) material.

24. (Previously presented) A display device such as in claim 9 such that the N-type light-emitting material is beside the cathode, carrier blocking layer after the light-emitting layer, a P-type material after the carrier blocking layer and a N-type light-sensing material, after the P-type material, forming a potential barrier at an anode-contact with the device.

25. (Previously presented) A display device such as in Claim 24 wherein the light-sensing area is sensitive to visible light and the light-emitting area emits visible light such that a feedback effect can take place to enhance interval of light emission.

26. (Previously presented) A display device such as in claim 13 wherein the light-sensing area is sensitive to visible light and the light-emitting area emits visible light such that there is a filter, obstructing ambient light, and allowing only a narrow band of visible light frequencies, including frequencies emitted by the light-emitting area, to pass through for a feedback effect.

27. (Previously presented) A monolithic display device comprising a first P-type light sensing material ~~is~~ beside a cathode, carrier blocking layer after the light-sensing material, a N-type light-emitting material after the carrier blocking layer and a second P-type material after the light-emitting material.

28. (Previously presented) A display device as in claim 27 wherein the P-type light sensing material forms a potential barrier at the cathode-contact.

29. (Previously presented) A display device as in claim 27 such that a first P-type layer consists of two different P-type materials adjacent to each other, wherein the one away from the cathode is a light-sensing material, a carrier blocking layer after the light-sensing material, a N-type light-emitting material after the carrier blocking layer and a P-type material after the light-emitting material; wherein the P-type material, adjacent the light-sensing material, forms a potential barrier at the cathode-contact.

30. (Previously presented) A display device as in claim 27 wherein the cathode-contact is made up low work function metal and the potential barrier at the cathode-contact is a Schottky junction.

31. (Previously presented) A display device as in claim 21 such that of the two P-type materials side by side, the one adjacent to the cathode slows dissipation of a charge build-up at the cathode caused by an incident laser on the light-sensing region.

32. (Previously presented) A display device as in claim 27 wherein a contact at anode adjacent to the second P-type material is made on Indium Tin Oxide.

33. (Previously presented) A display device as in claim 27 wherein the carrier blocking material is a hole blocker.

34. (Previously presented) A display device as in claim 27 wherein the N-type light-emitting area is made of N-type organic semiconductor made of tris (8-hydroxy-quinoline) aluminium (Alq_3) material.

35. (Previously presented) A display device as in claim 27 wherein an incident laser on the light-sensing area causes a charge build-up on the cathode-contact; wherein the P-type material adjacent to the cathode-contact has a trap energy level for trapping dissipating charges because of which it takes longer for the charge to dissipate at the cathode-contact such that a pixel in a display screen remains lighted for a frame period or more.

36. (Previously presented) A display device as in claim 27 wherein an incident laser on the light-sensing area causes a charge build-up on the cathode-contact; wherein there is a thin layer of material, at the cathode contact, having a trap energy level for trapping dissipating charges because of which it takes longer for the charge to dissipate at the cathode-contact such that a pixel in a display screen remains lighted for a frame period or more.

37. (Previously presented) A display device as in claim 27 wherein the light-sensing area is made of P-type organic semiconductor.

38. (Previously presented) A display device as in claim 27 wherein the light-sensing area is made is sensitive to infrared light only and the light-emitting area emits visible light only.

39. (Previously presented) A display device as in claim 27 wherein the light-sensing area is sensitive to infrared and visible light and the light-emitting area emits visible light such that a feedback effect can take place to enhance interval of light emission.

40. (Previously presented) A display device as in claim 27 such that a first P-type material is beside the cathode, a N-type light-sensing material after the first P-type material, a carrier blocking layer after the light-sensing material, a N-type light-emitting material after the carrier blocking layer and a second P-type material after the light-emitting material; wherein the P-type material forms a potential barrier at an cathode-contact.

41. (Previously presented) A display device as in claim 40 wherein the light-sensing area is sensitive to visible light and the light-emitting area emits visible light such that a feedback effect can take place to enhance interval of light emission.

42. (Previously presented) A display device such as in Claim 27 wherein the light-sensing area is sensitive to visible light and the light-emitting area emits visible light such that there is a filter, obstructing ambient light, and allowing only a narrow band of visible light frequencies, including frequencies emitted by the light-emitting area, to pass through for a feedback effect.

43. (Previously presented) A display device as in claim 13, wherein a pixel in a display screen remains lighted for a frame period or more due to a residual effect.

44. (Previously presented) A display device as in claim 27, wherein a pixel in a display screen remains lighted for a frame period or more due to a residual effect.